

To be sure, there are important and unmistakable similarities between the two causal doctrines. Both deny that there is any real interaction among finite created substances. Both refer to God as the ultimate explanation as to why the sequences of things and their states are such as they are. Most important, perhaps, both doctrines are answers to the same problem bequeathed by Cartesian metaphysics—not, indeed, the mind-body problem,²² but rather the problem of saving mechanistic explanations in physics. Both the occasionalist and Leibniz are, in essence, trying to give motion and its laws (as well as other dynamical properties of bodies) a firm causal and metaphysical foundation in force. Yet their respective solutions to this problem are sufficiently different to prevent confusion between the two. The occasionalist, for whom a body is nothing but extension, insists that force must be located outside of bodies, in the will of God. For Leibniz, on the other hand, there must be some force *in* bodies, some “vital principle superior to material notions” to explain why bodies behave as they do.²³ (Leibniz insists that if bodies were mere extension, then the laws of motion and the phenomena would be entirely different from what they, in fact, are.)²⁴ In the one case, then, certain aspects of Descartes’s own metaphysics of matter and motion (including God’s causal role therein) are made explicit.²⁵ In the other case, the Cartesian model is fundamentally revised.

Thus, one cannot but find irreconcilable differences between two theories, one of which grants to finite substances a genuine causal (albeit noninteractive) activity or power, the other of which denies that such substances have any causal efficacy whatsoever. And while God certainly plays an important causal role in both accounts, there is surely (or so Leibniz believes) no way of mistaking God’s direct and immediate causal role under occasionalism for his somewhat indirect and mediate role in the preestablished harmony.

The chapters that follow are all new contributions to the project of illuminating seventeenth-century thought on causation. They range from studies of non-Cartesian interactionist models and of Descartes’s own views on causation to analyses of occasionalism and the preestablished harmony; several of them engage in the important (but heretofore neglected) task of critically comparing the two doctrines. Taken together, the essays provide a rather broad and detailed picture of the nature of causal relations in early modern philosophy.

22. Although Leibniz himself believes that this is a problem that they are both intended to solve; see his letter to Arnauld of 30 April 1687.

23. *Specimen Dynamicum*, GM IV, 242.

24. *Discourse on Metaphysics* §21.

25. See, for example, *Principles of Philosophy* II, 36.

Daniel Garber

Descartes and Occasionalism

The doctrine of occasionalism was, of course, central to seventeenth-century metaphysics. On this widely held view, the changes that one body appears to cause in another upon impact, the changes that a body can cause in a mind in producing a sensation, or that a mind can cause in a body in producing a voluntary action are all due directly to God, moving bodies or producing sensations in minds on the occasions of other appropriate events. And so, on this view, the tickling of the retina and subsequent changes in the brain are only the “occasional causes” of the sensory idea I have of a friend in the distance; the real cause is God, who directly moves my sense organs when the light approaches them, moves the parts of the brain when the sensory organs are moved, and then produces the sensory idea I have of another person’s face in my mind when my sense organs and brain are in an appropriate state. Similarly, it is God who is the actual cause of my

arm's movement when I decide to raise it to wave; my volition is only an occasional cause.

Now, occasionalism was widely held among many of Descartes's followers; it can be found in various forms in Clauberg, Cleselier, Cordemoy, La Forge, Geulincx, and, most notably, in Malebranche.¹ And throughout its seventeenth-century career it is closely associated with Descartes's followers.² But to what extent is it really Descartes's own view? To what extent is it fair to attribute this view to the founder of the Cartesian school? This is the question that I shall explore here.

I. A Letter to Elizabeth

I will begin my investigation with a passage from a letter that Descartes wrote to the Princess Elizabeth on 6 October 1645:

All of the reasons which prove the existence of God and that he is the first and immutable cause of all of the effects which do not depend on the free will of men, prove in the same way, it seems to me, that he is also the cause of all of them that depend on it [i.e., free will]. For one can only prove that he exists by considering him as a supremely perfect being, and he would not be supremely perfect if something could happen in the world that did not derive entirely from him. . . . God is the universal cause of everything in such a way that he is in the same way the total cause of everything, and thus nothing can happen without his will.³

1. For general accounts of occasionalism among the members of the Cartesian school, see, for example, Joseph Prost, *Essai sur l'atomisme et l'occasionalisme dans la philosophie cartésienne* (Paris: Paulin, 1907); Henri Gouhier, *La vocation de Malebranche* (Paris: J. Vrin, 1926), ch. III; Jean-François Batail, *L'avecat philosophe Géraud de Cordemoy* (The Hague: Martinus Nijhoff, 1973), pp. 141–46; and Rainer Specht, *Commercium mentis et corporis: über Kausalvorstellungen im Cartesianismus* (Stuttgart–Bad Cannstatt: Friedrich Frommann Verlag, 1966), chs. II and III.

2. Indeed, when it first appears, it is closely associated with Descartes himself. It is an integral part of La Forge's commentary on Descartes's *Treatise on Man*, and it is one of the central points of a letter Cleselier, Descartes's literary executor, wrote to La Forge in December 1660, a letter that appeals to the authority of "notre Maître" on a number of occasions and that Cleselier published alongside Descartes's own letters in one of his volumes of the philosopher's collected correspondence. On La Forge, see Gouhier, *La vocation de Malebranche*, pp. 93–94; for the Cleselier letter, see Claude Cleselier, *Lettres de Mr Descartes* . . . *l'ome III* (Paris, 1667), pp. 640–46. I am indebted to Alan Gabbey for calling the Cleselier letter to my attention.

3. AT IV, 313–14 (K 180). This letter appeared in the first volume of Cleselier's edition of Descartes's correspondence in 1657.

This passage would seem to be quite clear in asserting that God is the real cause of everything in the world; if "nothing can happen without his will," as Descartes tells Elizabeth, then surely it is reasonable to infer that Descartes was an occasionalist.

He may, in the end, turn out to be an occasionalist, but I think that this passage is not so clear as it may look at first. When reading this, it is very important to place it in context, and understand what exactly Descartes was addressing in the passage. In this series of letters, Descartes is trying to console Elizabeth in her troubles. In a letter of 30 September 1645, she wrote:

[The fact] of the existence of God and his attributes can console us in the misfortunes that come to us from the ordinary course of nature and from the order which he has established there [as when we lose some good through a storm, or when we lose our health through an infection in the air, or our friends through death] but not in those [misfortunes] which are imposed on us by men, whose will appears to us to be entirely free. . . .⁴

Descartes's reply, as quoted above, is that all things, including human beings acting freely, are under the ultimate control of an omniscient, omnipotent, and benevolent God. In saying this, Descartes does not take himself to be saying anything particularly original; it is, indeed, a theological commonplace. While these kinds of theological issues have led thinkers in various theological traditions to take the issue of occasionalism seriously,⁵ it is not appropriate to infer the full-blown metaphysical doctrine of occasionalism from this commonplace observation, and conclude that Descartes held that God is the only real cause in nature; his words to Elizabeth are meant as consolation, not metaphysics.

The question of Descartes's occasionalism is still open. To settle it we have to turn to a more detailed investigation of his metaphysical and physical writings. I will divide the investigation into three parts, discussing first the case of body-body causation (one billiard ball hitting another), then mind-body causation (voluntary motions in human beings), and finally body-mind causation (sensation).

4. AT IV, 302.

5. For a recent discussion of some of this larger theological debate, see Alfred Fredoso, "Medieval Aristotelianism and the Case against Secondary Causation in Nature," in *Divine and Human Action: Essays in the Metaphysics of Theism*, ed. Thomas V. Morris (Ithaca, N.Y.: Cornell University Press, 1988).

II. The Case of Body-Body Causation

I will not pause (too) long over this case. It seems to me as clear as anything that, for Descartes, God is the only cause of motion in the inanimate world of bodies, that bodies cannot themselves be genuine causes of change in the physical world of extended substance. To understand why, let me turn for a moment to Descartes's reflections on motion and its laws.⁶

Descartes's conception of physics must be understood as being in opposition to an Aristotelian one, as a substitute for the kind of physics that was taught in the schools. Basic to the physics of the schools was the notion of a substantial form. According to the Aristotelian physics, each kind of thing had its own substantial form, and it was through this that the basic properties of things were to be explained. And so fire rises and stones fall because of their forms, for example. In this way, things were thought to have basic, inborn tendencies to behavior; physics consisted in finding out what these basic tendencies were and in explaining the manifest properties of things in those terms.

A basic move in Descartes's philosophy, something he shared with other contemporary adherents of the so-called mechanical philosophy, was the elimination of these substantial forms, these basic explanatory principles. But how, then, are we to explain the characteristic behavior of bodies? Descartes's strategy was simple; instead of locating the basic laws that govern the behavior of things in these forms, he placed them in God. That is, it is God, not substantial forms, that will ground the laws that govern bodies.

How God grounds the laws of motion is illustrated in the proofs that Descartes gives for them. These proofs are grounded in his celebrated doctrine of continual re-creation. Descartes writes in *Meditation III*:

All of the time of my life can be divided into innumerable parts, each of which is entirely independent of the others, so that from the fact that I existed a short time ago, it does not follow that I ought to exist now, unless some cause as it were creates me again in this moment, that is, conserves me.⁷

Now, he argues,

plainly the same force and action is needed to conserve any thing for the individual moments in which it endures as was needed for creating it anew, had it not existed.⁸

Clearly such a power is not in us; if it were, then, Descartes reasons, I would also have been able to give myself all of the perfections I clearly lack.⁹ And so, he concludes, it must be God that creates and sustains us.¹⁰ This conclusion, of course, holds for bodies as well as it does for us. It is not just souls, but all finite things that require some cause for their continued existence. And as with the idea of ourselves, "when I examine the idea of body, I perceive that it has no power [*vis*] in itself through which it can produce or conserve itself."¹¹ And so, we must conclude that the duration of bodies, too, must be caused by God, who sustains the physical world he created in the beginning.

This view of divine sustenance underlies Descartes's derivations of the laws of motion, both in *The World* of 1633 and in the *Principles of Philosophy* of 1644. Arguing for his conservation principle in the *Principles* (for example, the law that God maintains the same quantity of motion in the world), Descartes writes:

We also understand that there is perfection in God not only because he is in himself immutable, but also because he works in the most constant and immutable way. Therefore, with the exception of those changes which evident experience or divine revelation render certain, and which we perceive or believe happen without any change in the creator, we should suppose no other changes in his works, so as not to argue for an inconstancy in him. From this it follows, that it is most in harmony with reason for us to think that merely from the fact that God moved the parts of matter in different ways when he first created them, and now conserves the totality of that matter in the same way and with the same laws [*eademque ratione*] with which he created them earlier, he always conserves the same amount of motion in it.¹²

Similarly, consider his argument for the law that a body in motion tends to move rectilinearly, as that argument is given in the *Principles*:

8. *Ibid.*

9. See AT VII, 48, 168.

10. See AT VII, 49–50, 111, 165, 168, 369–70; and *Principles of Philosophy* 1.21.

11. AT VII, 118; see also p. 110.

12. *Principles of Philosophy* II.36.

6. For a fuller account of Descartes on the laws of motion, see Daniel Garber, *Descartes' Metaphysical Physics* (Chicago: University of Chicago Press, 1992).

7. AT VII, 49.

The reason [causa] for this rule is . . . the immutability and simplicity of the operation through which God conserves motion in matter. For he conserves it precisely as it is in the very moment of time in which he conserves it, without taking into account the way it might have been a bit earlier. And although no motion takes place in an instant, it is obvious that in the individual instants that can be designated while it is moving, everything that moves is determined to continue its motion in some direction, following a straight line, and never following a curved line.¹³

The picture in both of these arguments is reasonably clear: God stands behind the world of bodies and is the direct cause of their motion. In the old Aristotelian philosophy, the characteristic behavior of bodies was explained through substantial forms; in Descartes's new, up-to-date mechanism, forms are out, and God is in; in Descartes's new philosophy, the characteristic behavior of bodies is explained in terms of an immutable God sustaining the motion of bodies.

I think that it is reasonably clear, then, that in the material world, at least, God is the only genuine causal agent. There are some further subtleties in the argument that I will set aside for the moment, returning to at least one of them later. But before moving on to the somewhat more difficult cases of mind-body and body-mind causation, I would like to pause a moment and examine one complexity in the case.

Though it is clear that God is the real agent of change, the real cause of motion in the physical world, it is not at all clear how he does it, how he pulls it off. Though it is not appropriate to argue it in full detail here, it seems to me that there are at least two somewhat different models that one can find in Descartes for this.¹⁴ On one model, God sustains the world by re-creating a succession of discrete, timeless world stages, one after another, like frames in a movie film. On this view, God is conceived to cause motion by re-creating bodies in different places in different frames of the movie, as it were. We might call this the *cinematic view* of how God causes motion. But Descartes sometimes suggests something a bit different. On this alternative view, what God sustains is a world of bodies existing continually in time. Now, in this world, some bodies are at rest, while others are in motion. Those in motion, Descartes sometimes suggests, receive a kind of impulse from God. Writing to Descartes on 5 March 1649, More asked if

13. *Principles of Philosophy* II.39.

14. For a fuller development of this idea, see Garber, *Descartes' Metaphysical Physics*, ch. 9, or Daniel Garber, "How God Causes Motion: Descartes, Divine Sustainance, and Occasionalism," *Journal of Philosophy* 84 (1987): 567–80.

matter, whether we imagine it to be eternal or created yesterday, left to itself, and receiving no impulse from anything else, would move or be at rest?¹⁵

Descartes answered:

I consider "matter left to itself and receiving no impulse from anything else" as plainly being at rest. But it is impelled by God, conserving the same amount of motion or transference in it as he put there from the first.¹⁶

On this view, what might be called the *divine-impulse view*, God causes motion by impulse, by a kind of divine shove.

It is interesting to try to understand how Descartes thought of God as a cause of motion. But this distinction I have tried to make between the *cinematic view* and the *divine-impulse view* of God as a cause of motion will come in very handy when we are discussing Descartes's thoughts on mind-body causation, to which we must now turn.

III. The Case of Mind-Body Causation

The problem of mind-body causation is, of course, a central concern of Cartesian scholarship; there are few issues in his philosophy about which more ink has been spilled. But my interest in it here is relatively narrow: To what extent does Descartes think that there can be genuine mental causes of motions in the physical world, and to what extent does he believe, with the majority of his followers, that God is the true cause of motion in the world of bodies?

Here, as on the issue of body-body causation, I believe that the case is reasonably clear: for Descartes, I think, mind can be a genuine cause of motion in the world, indeed, as genuine a cause as God himself.

But though the case is, in the end, clear, it is not without its complications. As a number of later philosophers have noted, Descartes's views on God's role as continual re-creator, that which underlies the derivation of the laws of motion, as we have seen, would seem to lead us directly to a strong version of occasionalism, where God can be the only cause of change

15. AT V, 316.

16. AT V, 404 (K 258).

in the physical world. The argument is formulated neatly by Louis de la Forge:

I hold that there is no creature, spiritual or corporeal, that can change [the position of a body] or that of any of its parts in the second instant of its creation if the creator does not do it himself, since it is he who had produced this part of matter in place A. For example, not only is it necessary that he continue to produce it if he wants it to continue to exist, but also, since he cannot create it everywhere, nor can he create it outside of every place, he must himself put it in place B, if he wants it there, for if he were to have put it somewhere else, there is no force capable of removing it from there.¹⁷

The argument goes from the doctrine of continual re-creation, authentically Cartesian, to the conclusion that God can be the only cause of motion in the world. When God sustains a body, he must sustain it *somewhere*, and in sustaining it where he does he causes it to move or be at rest. And so, it seems, there is no room for any other causes of motion in the Cartesian world, in particular, mind; if mind is to have a role to play in where a given body is from moment to moment, it must work through God, who alone can sustain a body and who is ultimately responsible for putting a body one place or another.¹⁸

This argument is not decisive, I think. First of all, however good an argument it might be, I see no reason to believe that Descartes ever saw such consequences as following out of his doctrine of continual re-creation. But, more than that, I do not think that the argument is necessarily binding on Descartes. It is certainly persuasive, particularly if one takes what I called

17. Louis de la Forge, *Oeuvres Philosophiques*, ed. Pierre Clair (Paris: Presses Universitaires de France, 1974), p. 240. A similar argument can also be found in Dialogue VII of Malebranche's *Dialogues on Metaphysics*.

18. Though the argument concerns motion, states of body, and their causes, it would seem to hold for the causes of states of mind as well, insofar as the divine sustainer must sustain minds with the states that they have as much as he must sustain bodies in the places that they occupy. To these arguments from continual re-creation, one might also call attention to the several passages in which Descartes uses the word '*occasion*' to characterize particular causal relations (see Prost, *Essai*). But as argued in Gouhier, *La vocation de Malebranche*, pp. 83–88, this is hardly worth taking seriously as an argument. See also Jean Laporte, *Le rationalisme de Descartes* (Paris: Presses Universitaires de France, 1950), pp. 225–26. For general discussions of the term, see Batail, *L'avocat philosophe*, pp. 141–46, and Gérard de Cordemoy, *Oeuvres philosophiques*, ed. P. Clair and F. Girbal (Paris: Presses Universitaires de France, 1968), p. 322, n. 10; for a general discussion of the language of indirect causality in Descartes and the later Scholastics, see Specht, *Commercium mentis et corporis*, chs. II and III.

the cinematic view of God as a cause of motion, the view in which God causes motion by re-creating a body in different places in different instants of time. But the argument is considerably less persuasive if one takes what I earlier called the *divine-impulse* view of God as a cause of motion. On that view, God causes motion by providing an impulse, much as we take ourselves to move bodies by our own impulses. If this is how God causes motion, then his activity in sustaining bodies is distinct from his activity in causing motion, and there is no reason why there cannot be causes of motion distinct from God.¹⁹

There can be causes of motion for Descartes other than God. But it still remains to be shown that he thought that there are such causes. The question comes up quite explicitly in Descartes's last response to Henry More:

That transference that I call motion is a thing of no less entity than shape is, namely, it is a mode in body. However the force [*vis*] moving a [body] can be that of God conserving as much transference in matter as he placed in it at the first moment of creation or also that of a created substance, like our mind, or something else to which [God] gave the power [*vis*] of moving a body.²⁰

Descartes is here quite clear that some created substances, at the very least our minds, have the ability to cause motion. Furthermore, there is no suggestion in this passage that minds can cause motion in bodies only with God's direct help, as the occasionalists would hold. Indeed, our ability to cause motion in the world of bodies is the very model on which we understand how God does it, Descartes sometimes argues. Writing to Henry More in April 1649, he remarks:

Although I believe that no mode of acting belongs univocally to God and to his creatures, I confess, nevertheless, that I can find no idea in my mind which represents the way in which God or an angel can move matter, which is different from the idea that shows me the way in which I am conscious that I can move my own body through my thought.²¹

It would then be quite strange if Descartes held that minds are only the occasional causes of motion in the world. At least two passages in the

19. This argument is developed at greater length in Garber, "How God Causes Motion."

20. AT V, 403–4 (K 257).

21. AT V, 347 (K 252).

Principles also suggest that he meant to leave open the possibility that, in addition to God, minds could cause motion in the world. In defending the conservation principle, for example, Descartes argues that we should not admit any changes in nature "except for those changes, which evident experience or divine revelation render certain, and which we perceive or believe happen without any change in the creator."²² Such a proviso would certainly leave open the possibility that finite substances like our minds can be genuine causes of motion. Similarly, in presenting his impact law (law 3) in the *Principles* II.40, Descartes claims that the law covers the causes of all changes that can happen in bodies, "at least those that are corporeal, for we are not now inquiring into whether and how human minds and angels have the power [vis] for moving bodies, but we reserve this for our treatise *On Man*."²³ Again, Descartes is leaving open the possibility that there may be incorporeal causes of bodily change, that is to say, motion. And so, I think, we should take him completely at his word when on 29 July 1648 he writes to Arnauld:

That the mind, which is incorporeal, can set a body in motion is shown to us every day by the most certain and most evident experience, without the need of any reasoning or comparison with anything else.²⁴

Minds can cause motion in Descartes's world; there is genuine mind-body causation for him, it would seem. But before going on to examine the last case, that of body-mind causation in sensation, I will pause for a moment and examine a question raised by the passage from the letter to More that we have been examining: What is the "something else to which [God] gave the power [vis] of moving a body" to which Descartes refers? Angels are certainly included, the passage from *Principles* II.40 suggests; angels are also a lively topic of conversation in the earlier letters between Descartes and More. Indeed, when Descartes is discussing with him how we can comprehend God as a cause of motion through the way we conceive of ourselves as causes of motion, Descartes explicitly includes angels as creatures also capable of causing motion, like us and like God.²⁵ It is not absolutely impossible that Descartes meant to include bodies among the finite substances that can cause motion.²⁶ But I think that it is highly

22. *Principles of Philosophy* II.36.

23. *Principles of Philosophy* II.40.

24. AT V, 222 (K 235).

25. See AT V, 347 (K 252).

26. P.H.J. Hoenen, "Descartes's Mechanism," in *Descartes*, ed. Willis Doney (New York: Doubleday, Anchor, 1967), pp. 353–68, esp. p. 359, claims that he did include bodies here.

unlikely. If Descartes really thought that bodies could be causes of motion like God, us, and probably angels, I suspect that he would have included them explicitly in the answer to More; if bodies could be genuine causes of motion, this would be too important a fact to pass unmentioned. As I noted earlier, Descartes's whole strategy for deriving the laws of motion from the immutability of God presupposes that God is the real cause of motion and of change of motion in the inanimate world of bodies knocking up against one another; this reading of Descartes's view of inanimate motion seems too secure to be shaken on the basis of a possibly oblique remark in a letter.

Before going on to discuss the next case, I will take up one more brief issue. It is a standard view that, for Descartes, mind cannot cause motion in a body because to do so would violate his conservation law, that the total quantity of motion in the world must always remain constant. And so, it is claimed, minds can change the direction with which bodies move but cannot change the actual motion that they have. This is certainly a position that many of Descartes's later followers held. But I see no reason to believe that he himself ever maintained such a view. The argument is a bit complex, and I cannot develop the details here.²⁷ But briefly, there is no passage in Descartes that suggests in any but the weakest way that he ever held such a position, and there are other passages that strongly suggest that he did not. Furthermore, Descartes's conception of the grounds of the laws of motion in divine immutability would seem to impose no constraint on finite causes of motions, like minds. As I noted earlier, Descartes grounds the laws of motion in God's immutability; because God is immutable, he cannot add or subtract motion from the world. But though the conservation principle may constrain God's activity, it does not in any way constrain ours; in our mutability and imperfection, we are completely free to add or subtract motion from the world.

Correct on Republic's completely, it's this: the cause from God to mind & things is transmission. But the actual necessity is in an entirely free will.

IV. The Case of Body-Mind Causation

We have established, I think, two reasonably clear cases: for Descartes, God is responsible for all motion in the inanimate world; while in the world of

27. In Daniel Garber, "Mind, Body, and the Laws of Nature in Descartes and Leibniz," *Midwest Studies in Philosophy* 8 (1983): 105–33, I argue that, in fact, the laws of motion that Descartes posits for inanimate nature do not hold for motion caused by minds, and that, in this way, animate bodies, bodies attached to minds, stand outside the world of physics. I argue that the position widely attributed to Descartes, that the mind can change the direction in which a body is moving but not add or subtract speed (thus apparently violating the conservation principle) is not actually his view.

animate creatures, creatures like us who have souls, minds can cause motion in bodies. The last case we have to take care of is that of body-mind causation, the situation in which the motion of a body causes sensations in a mind. Again, our question is this: Is there genuine causality in this circumstance, or must God link the cause to the effect?

Here, unfortunately, I know of no easy way of settling the question about Descartes's views. It seems to me that he should be committed to the position that the body cannot be a genuine cause of sensation in the mind.

It seems to me that if the motion of bodies is due directly to God, and if bodies cannot be genuine causes of changes in the states of other bodies, then it would seem to follow that bodies cannot be genuine causes of changes in minds either. This, at least, is the logic of Descartes's position. While, to the best of my knowledge, there is no passage in his writings that settles the question with assurance, there is some reason to believe that this is a view that Descartes may have come to hold by the late 1640s, at least.

The evidence I have in mind is connected with the proof Descartes offers for the existence of a world of bodies. The argument first appears in 1641 in *Meditation VI*.²⁸ "Now there is in me a certain passive faculty for sensing, that is, a faculty for receiving and knowing the ideas of sensible things. But I could make no use of it unless a certain active faculty for producing or bringing about those ideas were either in me or in something else." So the argument begins. Descartes's strategy is to show that the active faculty in question is not in me (i.e., my mind), or in God, or in anything but bodies. "This [active faculty] cannot be in me, since it plainly presupposes no intellect, and these ideas are produced without my cooperation, and, indeed, often involuntarily," he writes. "Therefore it remains that it is in some substance different from me. . . . This substance is either body, or corporeal nature, namely, that which contains formally everything which is in the ideas [of bodies] objectively, or it is, indeed, in God, or some other creature nobler than body in which it [i.e., corporeal nature] is contained eminently." To show that bodies really exist, Descartes will eliminate the latter two possibilities, and show that the active faculty must be in bodies themselves, or else God would be a deceiver.

The argument in *Meditation VI* clearly asserts that bodies have an "active faculty" that corresponds to the "passive faculty" of sensation; the clear implication is that the body that exists in the world is the cause of my

28. The quotations below all come from AT VII, 79–80; for fuller treatment of the argument, see Martial Gueroult, *Descartes' Philosophy Interpreted According to the Order of Reasons*, trans. Roger Ariew (Minneapolis: University of Minnesota Press, 1984), vol. II, ch. XIV; Daniel Garber, "Sense in *Vita*: The Scientific Background to Descartes's *Meditations*," in *Essays on Descartes' "Meditations"*, ed. Amélie Rorty (Los Angeles and Berkeley: University of California Press, 1986), pp. 104–7.

sensation of it. The same basic argument comes up again, a few years later, in part II, section 1, of the *Principles of Philosophy of 1644*, where it begins as follows:

Now, it can scarcely be doubted that whatever we sense comes to us from some thing which is distinct from our mind. For it is not in our power to bring it about that we sense one thing rather than another; rather, this [i.e., what we sense] plainly depends upon the very thing that affects our senses.

As in the *Meditations*, Descartes goes on to examine the question as to whether the sensation might proceed from me, from God, or from something other than bodies. Talking about that from which the sensory idea proceeds, he says:

[W]e clearly understand that thing as something plainly different from God and from us (that is, different from our mind) and also we seem to ourselves clearly to see that its idea comes from things placed outside of us, things to which it [i.e., the idea] is altogether similar, and, as we have already observed, it is plainly repugnant to the nature of God that he be a deceiver.

And so, Descartes concludes, the sensory idea proceeds from a body.

The argument in the *Principles* is obviously similar to the one in the *Meditations*. But there is at least one crucial difference. The argument in *Meditation VI* starts with the observation that I have "a certain passive faculty for sensing"; what we seek is the active faculty that causes the sensations I have, and the ultimate conclusion is that that active faculty is found in bodies. But, interestingly enough, in the argument of the *Principles* there is no appeal to an active faculty. Indeed, the terminology Descartes uses to describe the relation between our sensation and the body that is the object of that sensation seems studiously noncausal; we all believe, Descartes tells us, that "whatever we sense comes to us [advenit] from something which is distinct from our mind," that the idea of body "comes from [advenire] things placed outside of us." The concern I have attributed to Descartes here is suggested further by a variant that arises between the Latin version of *Principles* II.1, which we have been discussing, and the French version published three years later in 1647. In the Latin, the crucial phrase reads as follows:

... We seem to ourselves clearly to see that its idea comes from things placed outside of us. . . .²⁹

29. *Principles of Philosophy* II.1, Latin version.

In the French translation, the phrase reads:

... it seems to us that the idea we have of it forms itself in us on the occasion of bodies from without.³⁰

One must, of course, be very careful drawing conclusions from variants between the Latin text and Picot's French translation; while some alternatives are clearly by Descartes, it is often unclear whether a given change is due to the author or to his translator. But this change is consistent with the trend already observed between Meditation VI and *Principles* II.1, Latin version, and weakens the causal implications further still. Rather than asserting that the idea *comes from* the thing, the French text says only that it "forms itself in us on the occasion of bodies from without." Furthermore, while it is by no means clear how to interpret the word 'occasion' in Descartes's vocabulary, the word is certainly suggestive of what is to become a technical term in later Cartesian vocabulary, that of an occasional cause, a cause whose effect is produced through the activity of God.³¹

It is difficult to say for sure why the two arguments differ in this respect, and one should always be open to the explanation that, as Descartes suggests in a number of places, metaphysical issues are taken up in the *Principles* in a somewhat abbreviated and simplified fashion, and that the *Meditations* must be regarded as the ultimate source for his considered views in that domain.³² But it is tempting to see in this variation the shadow of an important philosophical question Descartes was facing. It is possible that he eliminated the reference to an active faculty precisely because he was no longer certain that bodies could correctly be described as active causes of our sensations. The language he substitutes is, of course, consistent with bodies being active causes of sensations, as he may well have believed; but it is also consistent with a weaker view, on which our sensations *come from* bodies, but with the help of an agent, like God, distinct from the bodies themselves, which, in the strictest sense, are inert.

There is another place that is sometimes thought to support the attribution of occasionalism to Descartes. The passage I have in mind is the celebrated one from the *Notae in Programma* (1647):

Nothing reaches our mind from external objects through the sense organs except certain corporeal motions. . . . But neither the motions

30. *Principles of Philosophy* II.1, French version; emphasis added.

31. See the reference given in note 18 above in connection with the word 'occasion'.

32. On the relations between the *Meditations* and Part I of the *Principles*, see, for example, AT III, 233 (K 82), 259; AT V, 291 (K 246); and AT IX-2, 16.

themselves nor the shapes arising from them are conceived by us exactly as they occur in the sense organs, as I have explained at length in my *Dioptrics*. Hence it follows that the very ideas of the motions themselves and of the shape are innate in us. The ideas of pain, colors, sounds, and the like must be all the more innate if, on the occasion of certain corporeal motions, our mind is to be capable of representing them to itself, for there is no similarity between these ideas and the corporeal motions.³³

The use of the word 'occasion' in this context (as well as in a previous sentence on the same page) does lend some support to the claim that the use of the corresponding French word in the French translation of the *Principles*, published in the same year, is no accident, and may be significant for the way in which Descartes is thinking about body-mind causality. But it is important to recognize that the claim that the sensory idea is innate in the mind is, I think, irrelevant to the issue of Descartes's occasionalism. His worry here is not (primarily) the causal connection between the sensory stimulation and the resulting sensory idea; what worries him is their utter dissimilarity, the fact that the sensory idea is nothing like the motions that cause it. To make an analogy, consider, for example, a computer with a color monitor capable of displaying complicated graphics and pictures. Suppose that if I tap in a certain sequence of keystrokes, a picture of the Notre Dame in Paris appears on the screen. One might perhaps want to point out that the actual sequence of motions (i.e., the keystrokes) that causally produce the picture in no way "resembles" the picture, and one might infer from that fact to the claim that the picture must be innate in the machine, that is, stored in its memory. But one probably would not want to infer from that that the keystrokes are not in some sense the direct cause of the picture's appearing, that the keystrokes did not really elicit the picture; and one *certainly* would not want to infer that it was God who somehow connected the keyboard with the screen of the monitor. I think that the situation is similar with respect to Descartes's point in the passage quoted from the *Notae in Programma*; in this case, as in the computer case, Descartes's main point is simply that sensory ideas cannot come directly from the motions that cause them, but must, at best, be innate ideas that are elicited by the motions communicated to the brain by the sense organs. But even though this passage does not lend much support to the view that Descartes may have come to see God as connecting bodily motions with sensations, neither does it detract from the evidence I presented earlier. And so, while the evidence is not altogether satisfactory, it seems reasonable

33. AT VIII-2, 359.

to think that while Descartes may have seen bodies as genuine causes of sensations at the time that the *Meditations* was published in 1641, by the publication of the *Principles of Philosophy* a few years later he may have changed his view, holding something closer to what his occasionalist followers held, that God is the true cause of sensations on the occasion of certain motions in bodies.

V. Was Descartes an Occasionalist?

In the earlier parts of this chapter we have examined three different sorts of causal relations as treated by Descartes in his thought. While it seems clear that mind can be a genuine cause of motion in the physical world, it also seems clear that God is the real cause of change in the inanimate world of physics, and it seems probable that God is the real cause behind body-mind interaction, the causation of sensations in the mind. It thus seems clear that while Descartes may share some doctrines with the later occasionalists of the Cartesian school, he is not an occasionalist, strictly speaking, insofar as he does allow some finite causes into his world, minds at the very least.

Might we say, on this basis, that Descartes is a quasi-occasionalist, an occasionalist when it comes to the inanimate world, though not in the world of bodies connected to minds? The doctrine of occasionalism is certainly flexible enough to allow this. But even if we choose to view Descartes in this way, we must not lose sight of an important difference between Descartes and his occasionalist followers.

For many of Descartes's later followers, what is central to the doctrine of occasionalism is the denial of the efficacy of finite causes simply by virtue of their finitude. Clerselier, for example, argues for occasionalism by first establishing that only an incorporeal substance can cause motion in body. But, he claims, only an infinite substance, like God, can imprint new motion in the world "because the infinite distance there is between nothingness and being can only be surmounted by a power which is actually infinite."³⁴ Cordemoy argues similarly. Like Clerselier, he maintains that only an incorporeal substance can be the cause of motion in a body, and

that this incorporeal substance can only be infinite; he concludes by saying that "our weakness informs us that it is not our mind which makes [a body] move," and so he determines that what imparts motion to bodies and conserves it can only be "another Mind, to which nothing is lacking, [which] does it [i.e., causes motion] through its will."³⁵ And finally, the infinitude of God is central to the main argument that Malebranche offers for occasionalism in his major work, *De la recherche de la vérité*. The title of the chapter in which he presents his main arguments for the doctrine is "The most dangerous error in the philosophy of the ancients."³⁶ And the most dangerous error he is referring to is their belief that finite things can be genuine causes of the effects that they appear to produce, an error that, Malebranche claims, causes people to love and fear things other than God in the belief that they are the genuine causes of their happiness or unhappiness.³⁷ But why is it an error to believe that finite things can be genuine causes? Malebranche argues as follows:

As I understand it, a true cause is one in which the mind perceives a necessary connection between the cause and its effect. Now, it is only in an infinitely perfect being that one perceives a necessary connection between its will and its effects. Thus God is the only true cause, and only he truly has the power to move bodies. I further say that it is not conceivable that God could communicate to men or angels the power he has to move bodies. . . .³⁸

For these occasionalists, then, God must be the cause of motion in the world because only an infinite substance can be a genuine cause of anything at all.

But, as I understand it, Descartes's motivation is quite different. He seems to have no particular worries about finite causes as such. If I am right, he is quite happy to admit our minds and angels as finite causes of motion in the world of bodies. Indeed, it is through our own ability to cause motion in our bodies that we have the understanding we do of God and angels as causes of motion. When God enters as a cause of motion, it is simply to replace a certain set of finite causes, the substantial forms of the Schoolmen, which, Descartes thinks, are unavailable to do the job. He argued that the substantial forms of Scholastic philosophy were improper impositions of mind onto matter and must, as such, be rejected. But, one

34. Clerselier, *Lettres de Mr Descartes* . . . [*tome III*], p. 642. Clerselier argues that while a

finite incorporeal substance, like our mind, cannot add (or destroy) motion in the world, it can change its direction, because, unlike motion itself, "the determination of motion . . . adds nothing real in nature . . . and says no more than the motion itself does, which cannot be without determination" (*ibid.*). This, though, would seem to conflict with what Descartes himself told Clerselier in the letter of 17 February 1645, that motion and determination are two modes of body that "change with equal difficulty" (*AT IV*, 185).

35. Cordemoy, *Oeuvres philosophiques*, p. 143.

36. Malebranche, *De la recherche de la vérité* VI.2.iii: OCL 1, 643; LO 446.

37. OCL 1, 643–46; LO 446–48.

38. OCL 1, 649; LO 450.

might ask, if there are no forms, what can account for the motion that bodies have, for their characteristic behavior? What Descartes turns to is God. In this way he seems less a precursor of later occasionalism than the last of the Schoolmen, using God to do what substantial forms did for his teachers.³⁹

Eileen O'Neill

Influxus Physicus

There is hardly anyone who does not imagine the Soul as a little Angel lodged in the brain, where it contemplates the species which come to it from objects, like so many diverse little pictures which represent to it all that happens outside.

—Louis de la Forge, *Traité de l'esprit de l'homme*

I. The Problem

Leibniz appears to have originated the tripartite division of “systems” of change in created substances, which Wolff popularized, and which the

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This essay is dedicated to the memory of my friend Professor Charles Gillespie (1958–1991), University of Wisconsin–Madison.

39. Portions of this essay will also appear in Garber, *Descartes' Metaphysical Physics*.